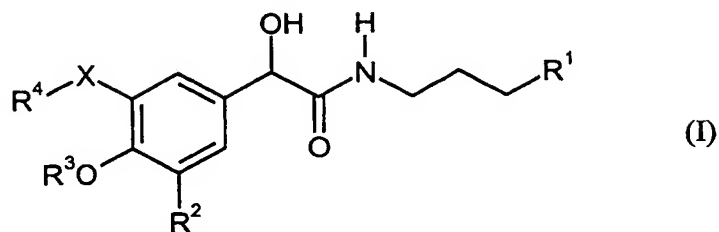


Claims

1. Use of mandelic acid alkylamides of general formula (I)

5



wherein

X represents a single bond or an oxygen atom

10

and

R¹ represents a linear or branched alkyl residue with 1 to 20 carbon atoms or a linear or branched alkenyl residue with 2 to 20 carbon atoms

15

and

R² represents a hydrogen atom, a hydroxy group or an O-R⁵ group

20

and

R³, R⁴ and R⁵, independently of one another, represent hydrogen or a lower alkyl residue or a lower alkenyl residue

25

or

R³ and R⁴ together represent a -CR⁶R⁷- group

and R^6 and R^7 , independently of one another, represent hydrogen or lower alkyl residues or lower alkenyl residues,

5 and the various stereoisomers or mixtures thereof as flavour compounds.

2. Use of

2-(4-hydroxyphenyl)-2-hydroxy-N-heptylacetamide,
2-(4-hydroxyphenyl)-2-hydroxy-N-octylacetamide,
10 2-(4-hydroxyphenyl)-2-hydroxy-N-nonylacetamide,
2-(4-methoxyphenyl)-2-hydroxy-N-heptylacetamide,
2-(4-methoxyphenyl)-2-hydroxy-N-octylacetamide,
2-(4-methoxyphenyl)-2-hydroxy-N-nonylacetamide,
2-(3,4-dihydroxyphenyl)-2-hydroxy-N-octylacetamide,
15 2-(3-hydroxy-4-methoxyphenyl)-2-hydroxy-N-heptylacetamide,
2-(3-hydroxy-4-methoxyphenyl)-2-hydroxy-N-octylacetamide,
2-(3-hydroxy-4-methoxyphenyl)-2-hydroxy-N-nonylacetamide,
2-(4-hydroxy-3-methoxyphenyl)-2-hydroxy-N-heptylacetamide,
2-(4-hydroxy-3-methoxyphenyl)-2-hydroxy-N-octylacetamide,
20 2-(4-hydroxy-3-methoxyphenyl)-2-hydroxy-N-nonylacetamide,
and
2-(4-hydroxy-3-methoxyphenyl)-2-hydroxy-N-(7-methyl-1-octyl)acetamide
and the various stereoisomers or mixtures thereof
as flavour compounds.

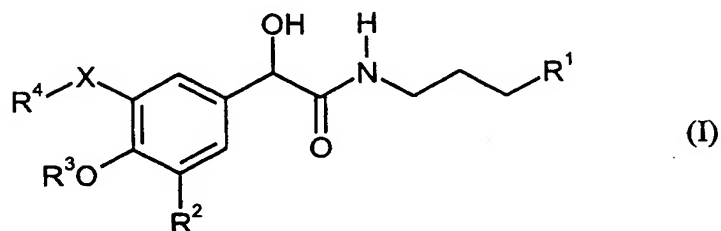
25

3. Use according to claim 1 or 2, wherein flavour compound means pungent compound or flavour compound with a heat-generating effect.

4. Use according to at least one of claims 1 to 3 in preparations for use in
30 nutrition or consumed for pleasure.

5. Use according to at least one of claims 1 to 3 in preparations for use in oral hygiene.

6. Preparations for use in nutrition, oral hygiene or consumed for pleasure containing mandelic acid alkylamides of general formula (I)



wherein

X represents a single bond or an oxygen atom

and

R¹ represents a linear or branched alkyl residue with 1 to 20 carbon atoms or a linear or branched alkenyl residue with 2 to 20 carbon atoms

and

R² represents a hydrogen atom, a hydroxy group or an O-R⁵ group

and

R³, R⁴ and R⁵, independently of one another, represent hydrogen or a lower alkyl residue or a lower alkenyl residue

or

R^3 and R^4 together represent a $-CR^6R^7-$ group

and

5

R^6 and R^7 , independently of one another, represent hydrogen or lower alkyl residues or lower alkenyl residues,

and the various stereoisomers or mixtures thereof.

10

7. Preparations according to claim 6, containing at least one other pungent-tasting or heat-generating substance.

8. Preparations according to claim 6, containing at least one pungent-tasting
15 plant extract.

9. Preparations according to claim 6, containing at least one other pungent-tasting or heat-generating substance and at least one pungent-tasting plant
extract.

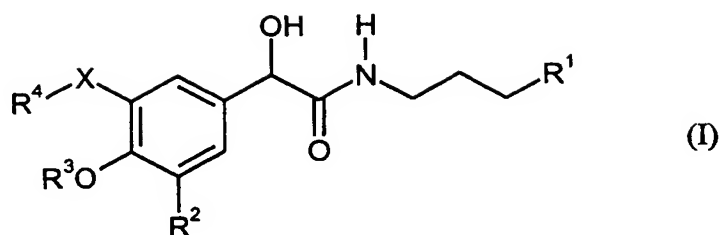
20

10. Preparations according to at least one of claims 6 to 9 in the form of semi-finished products.

25

11. Preparations according to at least one of claims 6 to 10 in the form of odour, flavour and taste compositions and seasoning mixes.

12. Mandelic acid alkylamides of general formula (I)



wherein

5 R^1 represents a linear or branched alkyl residue with 1 to 20 carbon atoms or a linear or branched alkenyl residue with 2 to 20 carbon atoms and

10 R^2 represents a hydrogen atom,

and

either

15 X represents a single bond,

R^3 a lower alkyl residue or a lower alkenyl residue and

20 R^4 hydrogen

or

X represents an oxygen atom,

25 R^3 hydrogen and

R^4 a lower alkyl residue or a lower alkenyl residue

or

X represents an oxygen atom,

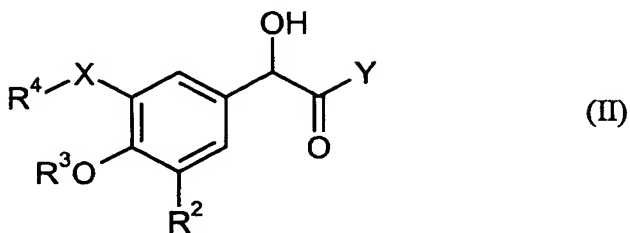
5 R^3 a lower alkyl residue or a lower alkenyl residue and

R^4 hydrogen

10 and the various stereoisomers or mixtures thereof with the exception that X represents an oxygen atom, R^1 1-pentyl, R^2 and R^3 hydrogen and R^4 methyl.

13. 2-(4-Hydroxyphenyl)-2-hydroxy-N-heptylacetamide,
 2-(4-hydroxyphenyl)-2-hydroxy-N-octylacetamide,
 2-(4-hydroxyphenyl)-2-hydroxy-N-nonylacetamide,
 15 2-(4-methoxyphenyl)-2-hydroxy-N-heptylacetamide,
 2-(4-methoxyphenyl)-2-hydroxy-N-octylacetamide,
 2-(4-methoxyphenyl)-2-hydroxy-N-nonylacetamide,
 2-(3-hydroxy-4-methoxyphenyl)-2-hydroxy-N-heptylacetamide,
 2-(3-hydroxy-4-methoxyphenyl)-2-hydroxy-N-nonylacetamide,
 20 2-(4-hydroxy-3-methoxyphenyl)-2-hydroxy-N-heptylacetamide,
 2-(4-hydroxy-3-methoxyphenyl)-2-hydroxy-N-nonylacetamide,
 and
 2-(4-hydroxy-3-methoxyphenyl)-2-hydroxy-N-(7-methyl-1-octyl)acetamide.

- 25 14. Production of the compounds according to claim 12 or 13, characterised in that a mandelic acid of general formula II



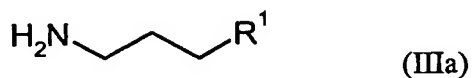
wherein

X, R², R³ and R⁴ have the meaning given in claim 12,

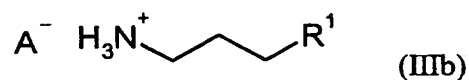
and

Y represents an activated nucleofuge,

or derivatives, the OH groups of which are protected with protective groups,
is reacted with an alkylamine of general formula (IIIa)



or an alkylammonium salt of general formula (IIIb)

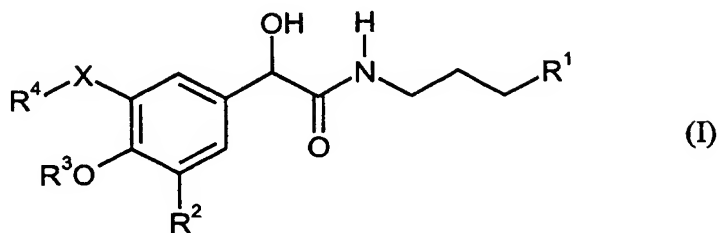


wherein R¹ has the meaning given above and A⁻ denotes an inorganic or
organic anion,

optionally in the presence of solvents and/or auxiliary bases, and the
protective groups of the OH groups are optionally split off.

15. Use of the mandelic acid alkylamides according to claims 1 to 2 in cosmetic
or dermatological preparations.

16. Cosmetic or dermatological preparations containing mandelic acid alkylamides of general formula (I)



5

wherein

X represents a single bond or an oxygen atom

10

and

R^1 represents a linear or branched alkyl residue with 1 to 20 carbon atoms or a linear or branched alkenyl residue with 2 to 20 carbon atoms

15

and

R^2 represents a hydrogen atom, a hydroxy group or an $O-R^5$ group

20

and

R^3 , R^4 and R^5 , independently of one another, represent hydrogen or a lower alkyl residue or a lower alkenyl residue

25

or

R^3 and R^4 together represent a $-CR^6R^7-$ group

and

R^6 and R^7 , independently of one another, represent hydrogen or lower alkyl residues or lower alkenyl residues,

5

and the various stereoisomers or mixtures thereof.